

1441	HIS	NE2	-2.608	42.086	31.264	4.14
1442	PHE	N	-2.489	45.762	34.785	10.90
1443	PHE	CA	-2.577	47.192	34.424	10.08
1444	PHE	C	-2.213	47.405	32.956	10.93
1445	PHE	O	-1.070	47.258	32.553	12.60
1446	PHE	CB	-1.586	48.018	35.254	8.89
1447	PHE	CG	-1.856	47.856	36.714	10.34
1448	PHE	CD1	-1.223	46.858	37.441	9.37
1449	PHE	CD2	-2.739	48.705	37.357	12.07
1450	PHE	CE1	-1.474	46.722	38.787	8.64
1451	PHE	CE2	-2.995	48.564	38.714	7.54
1452	PHE	CZ	-2.359	47.577	39.417	6.90
1453	HIS	N	-3.227	47.745	32.158	10.22
1454	HIS	CA	-3.060	47.678	30.720	10.82
1455	HIS	C	-3.094	49.072	30.056	11.67
1456	HIS	O	-4.145	49.698	29.957	13.22
1457	HIS	CB	-4.194	46.789	30.220	11.88
1458	HIS	CG	-4.060	46.522	28.750	9.09
1459	HIS	ND1	-3.037	46.925	27.987	14.21
1460	HIS	CD2	-4.958	45.845	27.938	9.60
1461	HIS	CE1	-3.331	46.498	26.751	10.85
1462	HIS	NE2	-4.488	45.829	26.687	11.12
1463	TYR	N	-1.914	49.518	29.591	11.21
1464	TYR	CA	-1.813	50.801	28.897	12.13
1465	TYR	C	-2.155	50.619	27.389	13.01
1466	TYR	O	-1.497	49.865	26.675	12.08
1467	TYR	CB	-0.388	51.305	29.131	11.51
1468	TYR	CG	-0.235	52.799	29.078	14.44
1469	TYR	CD1	-0.475	53.489	27.919	15.45
1470	TYR	CD2	0.267	53.497	30.164	13.74
1471	TYR	CE1	-0.140	54.860	27.837	15.14
1472	TYR	CE2	0.460	54.871	30.142	13.53
1473	TYR	CZ	0.229	55.578	28.981	12.44
1474	TYR	OH	0.435	56.939	28.993	13.99
1475	THR	N	-3.213	51.285	26.911	13.59
1476	THR	CA	-3.606	50.873	25.519	15.13
1477	THR	C	-3.481	52.067	24.538	16.95
1478	THR	O	-3.906	51.956	23.403	20.50
1479	THR	CB	-5.144	50.574	25.606	13.16
1480	THR	OG1	-5.954	51.612	26.206	15.62
1481	THR	CG2	-5.433	49.321	26.462	10.17
1482	THR	N	-2.858	53.182	24.942	15.57
1483	THR	CA	-2.577	54.214	23.880	14.73
1484	THR	C	-1.085	54.620	23.940	15.24
1485	THR	O	-0.720	55.737	23.634	16.37
1486	THR	CB	-3.210	55.519	24.477	15.29
1487	THR	OG1	-2.750	55.685	25.838	16.09
1488	THR	CG2	-4.765	55.520	24.411	14.63
1489	TRP	N	-0.197	53.698	24.382	13.79
1490	TRP	CA	1.223	53.979	24.245	12.12
1491	TRP	C	1.772	53.276	22.951	11.93
1492	TRP	O	1.876	52.056	22.904	14.64

1493	TRP	CB	1.906	53.454	25.513	13.19
1494	TRP	CG	3.394	53.773	25.583	10.47
1495	TRP	CD1	4.221	54.197	24.541	8.59
1496	TRP	CD2	4.228	53.714	26.768	11.45
1497	TRP	NE1	5.472	54.391	24.988	9.33
1498	TRP	CE2	5.529	54.103	26.358	11.57
1499	TRP	CE3	3.999	53.379	28.077	8.59
1500	TRP	CZ2	6.546	54.155	27.292	8.09
1501	TRP	CZ3	5.036	53.437	29.007	7.89
1502	TRP	CH2	6.317	53.825	28.620	3.96
1503	PRO	N	2.127	54.031	21.860	11.54
1504	PRO	CA	2.430	53.374	20.577	9.51
1505	PRO	C	3.765	52.621	20.539	9.46
1506	PRO	O	4.738	53.105	21.091	9.47
1507	PRO	CB	2.388	54.494	19.532	5.29
1508	PRO	CG	1.818	55.684	20.278	4.86
1509	PRO	CD	2.158	55.495	21.745	8.47
1510	ASP	N	3.775	51.454	19.864	8.54
1511	ASP	CA	5.035	50.736	19.645	10.50
1512	ASP	C	6.154	51.662	19.076	12.96
1513	ASP	O	5.907	52.405	18.129	15.10
1514	ASP	CB	4.794	49.507	18.750	10.62
1515	ASP	CG	5.909	48.497	18.955	11.09
1516	ASP	OD1	6.834	48.771	19.704	16.40
1517	ASP	OD2	5.840	47.423	18.386	12.44
1518	PHE	N	7.320	51.664	19.747	12.20
1519	PHE	CA	8.430	52.587	19.427	11.72
1520	PHE	C	8.102	54.085	19.493	12.78
1521	PHE	O	8.865	54.904	18.986	12.60
1522	PHE	CB	9.015	52.330	18.045	9.10
1523	PHE	CG	9.636	50.969	17.921	9.42
1524	PHE	CD1	10.917	50.751	18.407	7.65
1525	PHE	CD2	8.923	49.930	17.329	7.68
1526	PHE	CE1	11.479	49.496	18.292	7.82
1527	PHE	CE2	9.488	48.677	17.203	7.43
1528	PHE	CZ	10.762	48.468	17.686	6.08
1529	GLY	N	6.979	54.401	20.157	11.81
1530	GLY	CA	6.677	55.764	20.535	10.61
1531	GLY	C	6.660	55.972	22.034	13.38
1532	GLY	O	7.313	55.303	22.839	14.97
1533	VAL	N	5.865	56.984	22.375	14.24
1534	VAL	CA	5.933	57.538	23.723	13.51
1535	VAL	C	4.501	57.778	24.246	14.35
1536	VAL	O	3.562	57.882	23.459	15.05
1537	VAL	CB	6.733	58.845	23.784	11.74
1538	VAL	CG1	6.121	60.069	23.102	10.72
1539	VAL	CG2	8.255	58.752	23.835	12.09
1540	PRO	N	4.336	57.872	25.595	15.06
1541	PRO	CA	3.040	58.236	26.137	16.11
1542	PRO	C	2.530	59.619	25.634	17.94
1543	PRO	O	3.317	60.468	25.242	18.05
1544	PRO	CB	3.302	58.226	27.645	13.63

1545	PRO	CG	4.528	57.385	27.893	12.41
1546	PRO	CD	5.346	57.630	26.643	13.69
1547	GLU	N	1.202	59.808	25.668	20.58
1548	GLU	CA	0.652	61.098	25.215	24.47
1549	GLU	C	1.250	62.298	25.940	22.91
1550	GLU	O	1.492	63.361	25.390	25.20
1551	GLU	CB	-0.850	61.158	25.409	32.07
1552	GLU	CG	-1.590	60.311	24.379	47.45
1553	GLU	CD	-3.087	60.502	24.517	58.57
1554	GLU	OE1	-3.532	61.222	25.432	65.04
1555	GLU	OE2	-3.790	59.928	23.682	61.51
1556	SER	N	1.500	62.076	27.234	18.37
1557	SER	CA	2.197	63.131	27.944	15.28
1558	SER	C	2.757	62.537	29.222	14.24
1559	SER	O	2.365	61.449	29.650	14.09
1560	SER	CB	1.096	64.150	28.335	16.36
1561	SER	OG	-0.038	63.590	29.064	13.71
1562	PRO	N	3.694	63.279	29.870	16.15
1563	PRO	CA	4.138	62.933	31.224	15.80
1564	PRO	C	3.004	62.717	32.253	14.92
1565	PRO	O	3.058	61.827	33.071	16.83
1566	PRO	CB	5.050	64.111	31.635	15.53
1567	PRO	CG	5.523	64.712	30.308	13.98
1568	PRO	CD	4.387	64.458	29.311	14.91
1569	ALA	N	1.938	63.509	32.155	13.73
1570	ALA	CA	0.888	63.387	33.176	11.80
1571	ALA	C	0.126	62.067	33.107	12.67
1572	ALA	O	-0.162	61.442	34.116	15.33
1573	ALA	CB	-0.118	64.507	32.976	10.12
1574	SER	N	-0.196	61.656	31.875	13.30
1575	SER	CA	-0.925	60.382	31.746	13.82
1576	SER	C	-0.019	59.148	32.010	13.05
1577	SER	O	-0.412	58.220	32.690	15.15
1578	SER	CB	-1.429	60.366	30.317	14.32
1579	SER	OG	-0.511	60.907	29.312	19.74
1580	PHE	N	1.239	59.221	31.521	12.50
1581	PHE	CA	2.228	58.251	32.002	12.76
1582	PHE	C	2.343	58.176	33.577	11.82
1583	PHE	O	2.186	57.121	34.169	11.88
1584	PHE	CB	3.615	58.605	31.431	13.14
1585	PHE	CG	4.637	57.656	32.013	16.05
1586	PHE	CD1	4.686	56.327	31.585	14.24
1587	PHE	CD2	5.489	58.064	33.038	13.37
1588	PHE	CE1	5.556	55.424	32.196	13.11
1589	PHE	CE2	6.349	57.150	33.644	11.48
1590	PHE	CZ	6.383	55.827	33.237	9.34
1591	LEU	N	2.617	59.319	34.219	11.77
1592	LEU	CA	2.708	59.367	35.689	11.73
1593	LEU	C	1.410	58.893	36.391	10.70
1594	LEU	O	1.438	58.216	37.408	10.38
1595	LEU	CB	3.025	60.798	36.167	9.36
1596	LEU	CG	4.478	61.159	35.960	5.68

1597	LEU	CD1	5.549	60.306	36.660	9.00
1598	LEU	CD2	4.835	62.638	35.814	3.73
1599	ASN	N	0.271	59.271	35.828	10.41
1600	ASN	CA	-0.968	58.792	36.423	11.16
1601	ASN	C	-1.089	57.240	36.314	11.19
1602	ASN	O	-1.352	56.580	37.305	13.76
1603	ASN	CB	-2.069	59.596	35.747	11.22
1604	ASN	CG	-3.518	59.183	36.219	12.14
1605	ASN	OD1	-3.896	59.472	37.330	14.92
1606	ASN	ND2	-4.309	58.498	35.428	8.22
1607	PHE	N	-0.805	56.671	35.119	10.54
1608	PHE	CA	-0.779	55.193	35.030	10.34
1609	PHE	C	0.248	54.567	36.012	11.26
1610	PHE	O	-0.042	53.601	36.688	14.43
1611	PHE	CB	-0.512	54.781	33.582	10.28
1612	PHE	CG	-0.425	53.288	33.361	9.79
1613	PHE	CD1	0.808	52.629	33.406	11.60
1614	PHE	CD2	-1.556	52.540	33.059	9.63
1615	PHE	CE1	0.895	51.260	33.146	9.17
1616	PHE	CE2	-1.479	51.172	32.813	8.28
1617	PHE	CZ	-0.255	50.534	32.852	7.12
1618	LEU	N	1.439	55.168	36.111	11.04
1619	LEU	CA	2.470	54.642	36.987	9.37
1620	LEU	C	2.018	54.681	38.463	10.19
1621	LEU	O	2.198	53.743	39.237	10.47
1622	LEU	CB	3.736	55.476	36.727	8.63
1623	LEU	CG	4.917	55.081	37.636	6.66
1624	LEU	CD1	6.117	56.024	37.650	2.00
1625	LEU	CD2	5.215	53.570	37.847	4.01
1626	PHE	N	1.397	55.809	38.841	11.88
1627	PHE	CA	0.953	55.953	40.219	12.54
1628	PHE	C	-0.257	55.057	40.464	11.68
1629	PHE	O	-0.343	54.449	41.499	13.53
1630	PHE	CB	0.677	57.419	40.583	18.00
1631	PHE	CG	1.923	58.166	41.007	19.08
1632	PHE	CD1	3.029	58.239	40.174	19.03
1633	PHE	CD2	1.996	58.784	42.248	20.54
1634	PHE	CE1	4.208	58.855	40.582	18.32
1635	PHE	CE2	3.162	59.434	42.649	23.62
1636	PHE	CZ	4.284	59.461	41.825	21.78
1637	LYS	N	-1.164	54.891	39.512	11.07
1638	LYS	CA	-2.120	53.796	39.650	12.85
1639	LYS	C	-1.477	52.463	40.008	14.04
1640	LYS	O	-1.967	51.768	40.896	16.37
1641	LYS	CB	-2.922	53.586	38.373	16.95
1642	LYS	CG	-4.318	54.180	38.510	21.62
1643	LYS	CD	-5.385	53.142	38.905	25.54
1644	LYS	CE	-6.673	53.761	39.500	25.67
1645	LYS	NZ	-7.774	52.779	39.478	30.26
1646	VAL	N	-0.356	52.121	39.336	14.89
1647	VAL	CA	0.251	50.822	39.694	14.57
1648	VAL	C	0.969	50.877	41.070	14.27

1649	VAL	O	0.927	49.926	41.836	14.66
1650	VAL	CB	1.287	50.408	38.602	12.16
1651	VAL	CG1	0.967	50.623	37.128	10.83
1652	VAL	CG2	2.179	49.194	38.894	11.91
1653	ARG	N	1.645	52.008	41.379	14.32
1654	ARG	CA	2.136	52.229	42.754	15.07
1655	ARG	C	1.031	52.174	43.854	14.33
1656	ARG	O	1.086	51.389	44.780	14.82
1657	ARG	CB	2.852	53.578	42.830	17.02
1658	ARG	CG	4.273	53.559	42.279	13.14
1659	ARG	CD	4.819	54.963	42.208	14.56
1660	ARG	NE	6.213	54.951	41.816	17.25
1661	ARG	CZ	7.151	55.597	42.478	14.40
1662	ARG	NH1	6.810	56.358	43.478	11.54
1663	ARG	NH2	8.404	55.427	42.163	14.05
1664	GLU	N	0.019	52.995	43.747	13.57
1665	GLU	CA	-1.064	52.972	44.716	15.15
1666	GLU	C	-1.655	51.587	44.982	15.15
1667	GLU	O	-2.117	51.259	46.064	17.25
1668	GLU	CB	-2.186	53.776	44.127	17.33
1669	GLU	CG	-1.783	55.240	44.116	26.73
1670	GLU	CD	-2.040	55.944	45.433	33.32
1671	GLU	OE1	-1.492	57.025	45.592	34.31
1672	GLU	OE2	-2.768	55.425	46.287	38.92
1673	SER	N	-1.601	50.783	43.914	15.09
1674	SER	CA	-2.190	49.461	43.984	15.03
1675	SER	C	-1.471	48.479	44.930	16.60
1676	SER	O	-1.954	47.372	45.132	19.63
1677	SER	CB	-2.078	48.789	42.605	13.60
1678	SER	OG	-0.807	48.101	42.352	12.81
1679	GLY	N	-0.289	48.848	45.456	16.76
1680	GLY	CA	0.383	47.836	46.262	17.69
1681	GLY	C	1.256	46.857	45.477	21.84
1682	GLY	O	2.059	46.140	46.045	25.25
1683	SER	N	1.187	46.859	44.143	21.52
1684	SER	CA	1.899	45.727	43.512	18.70
1685	SER	C	3.343	45.801	43.485	21.56
1686	SER	O	3.983	44.799	43.241	23.22
1687	SER	CB	1.526	45.671	41.996	17.25
1688	SER	OG	0.078	45.551	41.812	15.02
1689	LEU	N	3.832	47.043	43.689	22.71
1690	LEU	CA	5.267	47.260	43.621	25.21
1691	LEU	C	5.971	46.987	44.956	28.44
1692	LEU	O	7.168	47.166	45.123	32.40
1693	LEU	CB	5.530	48.678	43.103	23.08
1694	LEU	CG	5.152	48.831	41.627	22.44
1695	LEU	CD1	6.028	47.953	40.742	22.73
1696	LEU	CD2	5.302	50.276	41.155	22.80
1697	SER	N	5.140	46.673	45.939	30.11
1698	SER	CA	5.719	46.649	47.256	33.16
1699	SER	C	6.475	45.373	47.510	31.90
1700	SER	O	6.234	44.343	46.911	34.68

1701	SER	CB	4.546	46.921	48.203	37.54
1702	SER	OG	4.262	48.388	48.292	42.64
1703	PRO	N	7.461	45.477	48.448	28.58
1704	PRO	CA	8.460	44.430	48.554	26.29
1705	PRO	C	7.977	43.176	49.267	25.94
1706	PRO	O	8.685	42.192	49.313	25.90
1707	PRO	CB	9.540	45.047	49.415	25.82
1708	PRO	CG	8.802	46.052	50.292	27.01
1709	PRO	CD	7.625	46.520	49.442	26.00
1710	GLU	N	6.753	43.231	49.826	25.30
1711	GLU	CA	6.147	41.998	50.313	25.00
1712	GLU	C	5.678	41.030	49.167	23.01
1713	GLU	O	5.322	39.874	49.383	23.82
1714	GLU	CB	5.055	42.375	51.309	32.49
1715	GLU	CG	4.100	43.491	50.809	45.13
1716	GLU	CD	2.635	43.121	51.003	53.12
1717	GLU	OE1	2.305	41.954	51.249	57.67
1718	GLU	OE2	1.825	44.041	50.923	54.61
1719	HIS	N	5.757	41.530	47.916	19.60
1720	HIS	CA	5.382	40.713	46.750	16.53
1721	HIS	C	6.608	40.318	45.908	14.85
1722	HIS	O	7.657	40.935	46.002	18.13
1723	HIS	CB	4.469	41.549	45.834	16.49
1724	HIS	CG	3.186	41.819	46.543	16.48
1725	HIS	ND1	2.705	43.052	46.753	19.82
1726	HIS	CD2	2.315	40.880	47.113	17.11
1727	HIS	CE1	1.564	42.877	47.445	17.32
1728	HIS	NE2	1.308	41.580	47.657	16.80
1729	GLY	N	6.441	39.313	45.037	10.74
1730	GLY	CA	7.480	39.072	44.033	8.36
1731	GLY	C	7.639	40.271	43.101	10.21
1732	GLY	O	6.842	41.204	43.135	10.12
1733	PRO	N	8.672	40.305	42.215	11.23
1734	PRO	CA	8.791	41.488	41.376	11.31
1735	PRO	C	7.586	41.597	40.436	13.76
1736	PRO	O	7.115	40.556	39.982	15.58
1737	PRO	CB	10.071	41.270	40.602	11.62
1738	PRO	CG	10.485	39.825	40.768	10.97
1739	PRO	CD	9.655	39.266	41.909	10.99
1740	VAL	N	7.067	42.823	40.180	12.46
1741	VAL	CA	6.099	43.008	39.084	10.53
1742	VAL	C	6.698	42.540	37.776	8.69
1743	VAL	O	7.876	42.742	37.532	5.62
1744	VAL	CB	5.714	44.493	39.007	12.64
1745	VAL	CG1	4.325	44.836	38.477	13.13
1746	VAL	CG2	6.817	45.499	38.640	14.34
1747	VAL	N	5.857	41.916	36.948	8.33
1748	VAL	CA	6.266	41.620	35.592	10.28
1749	VAL	C	5.777	42.727	34.650	10.89
1750	VAL	O	4.589	42.975	34.553	14.16
1751	VAL	CB	5.588	40.298	35.212	7.81
1752	VAL	CG1	5.790	39.085	36.150	3.89

1753	VAL	CG2	5.488	39.993	33.708	9.30
1754	VAL	N	6.693	43.374	33.943	8.73
1755	VAL	CA	6.230	44.364	32.984	8.66
1756	VAL	C	6.557	43.846	31.596	11.40
1757	VAL	O	7.631	43.296	31.372	11.10
1758	VAL	CB	7.079	45.597	33.283	4.62
1759	VAL	CG1	7.273	45.981	34.747	5.26
1760	VAL	CG2	7.039	46.751	32.271	6.18
1761	HIS	N	5.625	44.053	30.653	11.47
1762	HIS	CA	5.949	43.726	29.291	9.12
1763	HIS	C	5.390	44.767	28.325	10.76
1764	HIS	O	4.416	45.484	28.572	9.76
1765	HIS	CB	5.537	42.311	28.991	7.01
1766	HIS	CG	4.100	42.188	28.648	6.87
1767	HIS	ND1	3.610	42.276	27.377	6.42
1768	HIS	CD2	3.046	41.886	29.498	7.35
1769	HIS	CE1	2.317	42.030	27.445	3.34
1770	HIS	NE2	1.946	41.795	28.713	6.66
1771	CYS	N	6.034	44.779	27.145	9.68
1772	CYS	CA	5.396	45.284	25.959	8.47
1773	CYS	C	5.349	44.168	24.910	8.61
1774	CYS	O	5.015	43.037	25.183	9.39
1775	CYS	CB	6.155	46.470	25.439	9.17
1776	CYS	SG	7.918	46.279	25.682	10.04
1777	SER	N	5.732	44.480	23.683	8.84
1778	SER	CA	5.746	43.399	22.743	8.32
1779	SER	C	7.091	42.628	22.814	9.11
1780	SER	O	7.164	41.412	22.865	6.41
1781	SER	CB	5.589	44.028	21.316	4.93
1782	SER	OG	5.503	43.095	20.188	2.00
1783	ALA	N	8.209	43.407	22.865	8.74
1784	ALA	CA	9.538	42.795	23.004	5.14
1785	ALA	C	9.982	42.703	24.478	8.48
1786	ALA	O	10.901	41.977	24.865	8.15
1787	ALA	CB	10.555	43.604	22.223	2.07
1788	GLY	N	9.283	43.536	25.298	7.00
1789	GLY	CA	9.738	43.634	26.670	7.25
1790	GLY	C	10.994	44.521	26.895	9.02
1791	GLY	O	11.684	44.322	27.873	8.42
1792	ILE	N	11.272	45.454	25.949	8.13
1793	ILE	CA	12.439	46.358	26.075	6.90
1794	ILE	C	12.129	47.884	25.909	6.67
1795	ILE	O	12.517	48.706	26.735	6.93
1796	ILE	CB	13.600	45.878	25.157	7.40
1797	ILE	CG1	13.304	45.896	23.645	6.63
1798	ILE	CG2	14.029	44.484	25.566	6.11
1799	ILE	CD1	14.447	45.330	22.799	2.00
1800	GLY	N	11.389	48.259	24.844	5.07
1801	GLY	CA	11.257	49.697	24.559	3.39
1802	GLY	C	10.479	50.506	25.591	7.26
1803	GLY	O	11.016	51.213	26.448	8.47
1804	ARG	N	9.146	50.302	25.486	9.36

1805	ARG	CA	8.119	50.783	26.438	7.15
1806	ARG	C	8.349	50.290	27.911	8.03
1807	ARG	O	8.254	51.041	28.878	5.27
1808	ARG	CB	6.735	50.387	25.888	4.52
1809	ARG	CG	6.355	51.122	24.594	7.50
1810	ARG	CD	4.963	50.741	24.037	5.39
1811	ARG	NE	5.123	49.454	23.386	2.97
1812	ARG	CZ	4.249	48.999	22.515	6.48
1813	ARG	NH1	3.100	49.567	22.403	8.00
1814	ARG	NH2	4.539	48.025	21.692	6.37
1815	SER	N	8.704	48.990	28.053	8.64
1816	SER	CA	8.988	48.505	29.429	11.85
1817	SER	C	10.194	49.159	30.098	13.94
1818	SER	O	10.135	49.549	31.256	14.70
1819	SER	CB	9.251	46.983	29.317	9.42
1820	SER	OG	8.298	46.180	28.561	10.50
1821	GLY	N	11.295	49.287	29.298	13.08
1822	GLY	CA	12.465	50.017	29.805	12.72
1823	GLY	C	12.183	51.482	30.203	12.38
1824	GLY	O	12.630	51.952	31.232	11.48
1825	THR	N	11.373	52.164	29.392	13.33
1826	THR	CA	10.876	53.522	29.710	12.47
1827	THR	C	10.128	53.607	31.051	11.44
1828	THR	O	10.480	54.379	31.932	10.01
1829	THR	CB	9.919	53.908	28.580	13.96
1830	THR	OG1	10.500	53.936	27.312	14.77
1831	THR	CG2	9.296	55.291	28.720	14.36
1832	PHE	N	9.086	52.761	31.159	10.63
1833	PHE	CA	8.301	52.618	32.390	10.77
1834	PHE	C	9.161	52.415	33.683	13.07
1835	PHE	O	9.077	53.163	34.662	13.04
1836	PHE	CB	7.336	51.445	32.182	7.40
1837	PHE	CG	6.474	51.211	33.370	8.91
1838	PHE	CD1	5.294	51.939	33.535	9.56
1839	PHE	CD2	6.833	50.260	34.332	11.15
1840	PHE	CE1	4.472	51.724	34.635	6.80
1841	PHE	CE2	6.011	50.042	35.441	12.86
1842	PHE	CZ	4.826	50.776	35.585	8.20
1843	CYS	N	10.001	51.358	33.587	11.48
1844	CYS	CA	10.913	51.025	34.674	11.25
1845	CYS	C	11.955	52.098	34.908	10.61
1846	CYS	O	12.298	52.389	36.041	11.12
1847	CYS	CB	11.666	49.694	34.478	12.63
1848	CYS	SG	10.535	48.313	34.271	13.23
1849	LEU	N	12.490	52.692	33.840	7.85
1850	LEU	CA	13.512	53.666	34.153	7.84
1851	LEU	C	12.924	54.861	34.963	9.98
1852	LEU	O	13.454	55.271	36.001	9.91
1853	LEU	CB	14.179	54.130	32.867	8.17
1854	LEU	CG	15.152	55.294	33.101	8.10
1855	LEU	CD1	15.641	55.866	31.788	10.22
1856	LEU	CD2	16.308	54.805	33.900	5.46

1857	ALA	N	11.765	55.366	34.479	9.15
1858	ALA	CA	11.145	56.409	35.272	8.72
1859	ALA	C	10.859	55.961	36.758	9.37
1860	ALA	O	11.252	56.616	37.720	8.82
1861	ALA	CB	9.933	56.906	34.502	6.08
1862	ASP	N	10.206	54.798	36.899	12.15
1863	ASP	CA	9.882	54.384	38.274	12.54
1864	ASP	C	11.120	54.327	39.195	12.62
1865	ASP	O	11.125	54.868	40.301	14.12
1866	ASP	CB	9.135	53.047	38.255	10.97
1867	ASP	CG	8.677	52.635	39.683	13.96
1868	ASP	OD1	8.123	53.446	40.424	11.13
1869	ASP	OD2	8.896	51.507	40.090	16.12
1870	THR	N	12.183	53.716	38.673	11.33
1871	THR	CA	13.409	53.627	39.496	12.31
1872	THR	C	14.030	54.924	39.818	12.62
1873	THR	O	14.421	55.178	40.946	13.17
1874	THR	CB	14.390	52.694	38.719	12.56
1875	THR	OG1	13.877	51.364	38.413	12.72
1876	THR	CG2	15.640	52.493	39.580	10.83
1877	CYS	N	14.069	55.784	38.801	11.92
1878	CYS	CA	14.552	57.116	39.077	10.93
1879	CYS	C	13.771	57.825	40.199	11.91
1880	CYS	O	14.365	58.424	41.096	13.19
1881	CYS	CB	14.542	57.925	37.797	10.56
1882	CYS	SG	15.955	57.393	36.809	11.98
1883	LEU	N	12.437	57.700	40.148	10.59
1884	LEU	CA	11.638	58.318	41.208	11.97
1885	LEU	C	11.860	57.690	42.599	12.62
1886	LEU	O	12.008	58.369	43.598	16.19
1887	LEU	CB	10.156	58.266	40.800	11.83
1888	LEU	CG	9.808	59.325	39.729	7.13
1889	LEU	CD1	10.407	60.753	39.850	6.19
1890	LEU	CD2	8.408	59.256	39.129	7.45
1891	LEU	N	11.933	56.374	42.599	10.74
1892	LEU	CA	12.298	55.683	43.835	12.52
1893	LEU	C	13.630	56.165	44.485	14.94
1894	LEU	O	13.753	56.451	45.664	14.86
1895	LEU	CB	12.445	54.210	43.454	14.62
1896	LEU	CG	12.070	53.202	44.542	18.58
1897	LEU	CD1	11.573	53.687	45.902	18.58
1898	LEU	CD2	12.714	51.819	44.495	18.21
1899	LEU	N	14.657	56.205	43.622	16.93
1900	LEU	CA	15.944	56.730	44.029	16.68
1901	LEU	C	15.899	58.125	44.634	17.07
1902	LEU	O	16.407	58.365	45.718	17.96
1903	LEU	CB	16.865	56.799	42.823	15.86
1904	LEU	CG	17.819	55.637	42.653	16.83
1905	LEU	CD1	18.150	55.210	41.239	20.58
1906	LEU	CD2	17.889	54.560	43.724	20.85
1907	MET	N	15.289	59.030	43.862	17.43
1908	MET	CA	15.045	60.372	44.363	17.74

1909	MET	C	14.356	60.343	45.749	20.59
1910	MET	O	14.705	61.087	46.653	19.57
1911	MET	CB	14.202	61.069	43.311	15.42
1912	MET	CG	14.045	62.573	43.556	22.27
1913	MET	SD	13.221	63.451	42.216	26.88
1914	MET	CE	14.257	62.910	40.846	20.89
1915	ASP	N	13.406	59.399	45.879	21.94
1916	ASP	CA	12.588	59.263	47.068	20.62
1917	ASP	C	13.373	58.964	48.367	22.12
1918	ASP	O	13.158	59.545	49.428	21.16
1919	ASP	CB	11.560	58.168	46.825	17.54
1920	ASP	CG	10.247	58.505	47.525	17.97
1921	ASP	OD1	10.130	59.552	48.186	16.33
1922	ASP	OD2	9.323	57.702	47.398	16.58
1923	LYS	N	14.304	58.014	48.244	24.18
1924	LYS	CA	14.838	57.506	49.461	30.25
1925	LYS	C	15.855	58.477	50.159	31.26
1926	LYS	O	16.111	58.474	51.360	31.16
1927	LYS	CB	15.431	56.139	49.330	34.06
1928	LYS	CG	16.631	56.140	48.175	37.83
1929	LYS	CD	16.505	54.826	47.413	40.81
1930	LYS	CE	15.165	53.967	47.642	45.68
1931	LYS	NZ	15.491	52.600	48.093	49.67
1932	ARG	N	16.448	59.284	49.291	32.87
1933	ARG	CA	17.298	60.331	49.838	34.54
1934	ARG	C	16.556	61.652	49.897	32.47
1935	ARG	O	16.969	62.544	50.607	35.59
1936	ARG	CB	18.529	60.438	48.950	40.97
1937	ARG	CG	18.224	60.378	47.464	42.29
1938	ARG	CD	19.440	59.951	46.685	46.58
1939	ARG	NE	19.789	58.566	46.787	51.13
1940	ARG	CZ	20.305	57.917	45.732	51.55
1941	ARG	NH1	20.573	58.530	44.593	50.19
1942	ARG	NH2	20.556	56.659	45.871	52.57
1943	LYS	N	15.477	61.744	49.085	28.06
1944	LYS	CA	14.887	63.034	48.739	23.26
1945	LYS	C	15.871	63.979	48.006	22.95
1946	LYS	O	15.846	65.185	48.145	24.32
1947	LYS	CB	14.280	63.666	49.994	20.64
1948	LYS	CG	13.096	62.885	50.574	17.75
1949	LYS	CD	11.829	63.028	49.746	16.37
1950	LYS	CE	10.610	62.496	50.484	18.59
1951	LYS	NZ	9.607	61.996	49.547	18.19
1952	ASP	N	16.744	63.378	47.216	22.49
1953	ASP	CA	17.804	64.139	46.613	22.01
1954	ASP	C	17.837	63.901	45.057	22.36
1955	ASP	O	18.396	63.068	44.529	20.34
1956	ASP	CB	19.135	63.784	47.280	22.14
1957	ASP	CG	20.281	64.530	46.551	24.82
1958	ASP	OD1	20.036	65.282	45.596	27.44
1959	ASP	OD2	21.408	64.386	46.894	28.31
1960	PRO	N	17.129	64.817	44.351	22.38

1961	PRO	CA	17.082	64.625	42.912	22.74
1962	PRO	C	18.394	64.663	42.163	23.45
1963	PRO	O	18.563	64.065	41.106	23.06
1964	PRO	CB	16.208	65.798	42.474	22.60
1965	PRO	CG	15.495	66.302	43.723	20.02
1966	PRO	CD	16.375	65.912	44.883	22.19
1967	SER	N	19.308	65.388	42.820	25.88
1968	SER	CA	20.553	65.744	42.163	28.66
1969	SER	C	21.583	64.640	42.365	28.70
1970	SER	O	22.595	64.553	41.674	34.40
1971	SER	CB	20.987	67.189	42.600	32.17
1972	SER	OG	20.078	68.376	42.408	38.47
1973	SER	N	21.286	63.704	43.228	24.95
1974	SER	CA	22.122	62.506	43.080	22.47
1975	SER	C	21.408	61.415	42.208	24.29
1976	SER	O	21.632	60.237	42.481	28.47
1977	SER	CB	21.899	61.880	44.476	19.35
1978	SER	OG	20.447	61.522	44.588	19.02
1979	VAL	N	20.496	61.724	41.238	23.38
1980	VAL	CA	20.110	60.629	40.317	21.74
1981	VAL	C	20.696	60.973	38.944	21.15
1982	VAL	O	20.505	62.041	38.378	21.56
1983	VAL	CB	18.614	60.127	40.291	22.27
1984	VAL	CG1	17.992	60.001	38.888	19.64
1985	VAL	CG2	17.642	60.735	41.319	19.29
1986	ASP	N	21.402	60.004	38.419	19.17
1987	ASP	CA	21.900	60.033	37.078	18.10
1988	ASP	C	21.109	59.025	36.194	15.54
1989	ASP	O	21.381	57.837	36.153	15.08
1990	ASP	CB	23.343	59.668	37.302	19.38
1991	ASP	CG	24.180	59.829	36.067	22.12
1992	ASP	OD1	23.681	59.769	34.927	18.04
1993	ASP	OD2	25.375	60.010	36.276	24.29
1994	ILE	N	20.110	59.581	35.484	15.98
1995	ILE	CA	19.186	58.824	34.619	14.13
1996	ILE	C	19.943	57.927	33.639	13.36
1997	ILE	O	19.658	56.735	33.541	14.33
1998	ILE	CB	18.150	59.751	33.905	14.98
1999	ILE	CG1	17.376	60.610	34.912	15.47
2000	ILE	CG2	17.135	58.986	33.014	15.21
2001	ILE	CD1	16.406	61.621	34.258	15.57
2002	LYS	N	20.940	58.512	32.906	13.55
2003	LYS	CA	21.574	57.679	31.868	14.54
2004	LYS	C	22.324	56.502	32.481	12.60
2005	LYS	O	22.324	55.397	31.976	14.35
2006	LYS	CB	22.600	58.431	31.039	19.78
2007	LYS	CG	22.050	59.595	30.233	28.21
2008	LYS	CD	23.189	60.536	29.694	33.36
2009	LYS	CE	24.131	61.030	30.806	38.77
2010	LYS	NZ	24.213	62.457	30.838	39.28
2011	LYS	N	22.936	56.831	33.609	13.28
2012	LYS	CA	23.649	55.839	34.394	15.81

2013	LYS	C	22.728	54.716	34.947	16.74
2014	LYS	O	23.120	53.553	35.015	17.00
2015	LYS	CB	24.324	56.596	35.524	18.25
2016	LYS	CG	25.428	55.816	36.190	24.61
2017	LYS	CD	26.426	56.748	36.886	31.08
2018	LYS	CE	27.219	57.609	35.891	33.12
2019	LYS	NZ	28.384	58.196	36.565	38.51
2020	VAL	N	21.473	55.107	35.320	15.03
2021	VAL	CA	20.508	54.123	35.787	12.06
2022	VAL	C	19.952	53.242	34.667	10.81
2023	VAL	O	19.752	52.042	34.805	10.34
2024	VAL	CB	19.461	54.608	36.785	11.58
2025	VAL	CG1	18.054	54.087	36.638	10.48
2026	VAL	CG2	19.699	55.895	37.544	10.22
2027	LEU	N	19.772	53.885	33.526	10.79
2028	LEU	CA	19.436	53.099	32.349	8.94
2029	LEU	C	20.548	52.062	32.020	8.48
2030	LEU	O	20.294	50.918	31.723	8.83
2031	LEU	CB	19.293	54.082	31.185	10.94
2032	LEU	CG	18.735	53.416	29.924	12.07
2033	LEU	CD1	18.531	54.306	28.709	12.15
2034	LEU	CD2	17.687	52.271	30.071	12.74
2035	LEU	N	21.797	52.491	32.138	8.39
2036	LEU	CA	22.910	51.562	31.944	9.03
2037	LEU	C	23.023	50.436	33.014	9.12
2038	LEU	O	23.321	49.296	32.672	11.52
2039	LEU	CB	24.196	52.402	31.926	12.18
2040	LEU	CG	24.764	52.758	30.531	14.87
2041	LEU	CD1	25.445	54.117	30.349	13.96
2042	LEU	CD2	24.118	52.171	29.284	16.58
2043	ASP	N	22.759	50.740	34.317	10.70
2044	ASP	CA	22.692	49.615	35.266	12.69
2045	ASP	C	21.562	48.644	34.854	12.49
2046	ASP	O	21.672	47.428	34.883	13.96
2047	ASP	CB	22.578	50.077	36.745	12.75
2048	ASP	CG	23.504	49.125	37.609	19.37
2049	ASP	OD1	24.668	49.405	37.774	18.61
2050	ASP	OD2	23.102	48.048	38.058	18.50
2051	MET	N	20.479	49.260	34.346	13.94
2052	MET	CA	19.382	48.416	33.885	12.52
2053	MET	C	19.769	47.475	32.725	11.34
2054	MET	O	19.403	46.298	32.750	10.85
2055	MET	CB	18.218	49.297	33.477	12.33
2056	MET	CG	17.250	49.543	34.624	15.57
2057	MET	SD	15.727	50.299	34.084	17.56
2058	MET	CE	15.056	50.546	35.719	21.12
2059	ARG	N	20.500	48.014	31.717	10.37
2060	ARG	CA	20.829	47.189	30.532	11.63
2061	ARG	C	21.931	46.116	30.833	12.35
2062	ARG	O	22.276	45.276	30.016	14.86
2063	ARG	CB	21.135	48.021	29.251	7.82
2064	ARG	CG	20.382	49.348	29.129	10.04

2065	ARG	CD	19.630	49.616	27.841	10.30
2066	ARG	NE	20.491	49.785	26.689	13.76
2067	ARG	CZ	20.030	50.198	25.490	13.60
2068	ARG	NH1	18.843	50.675	25.351	14.69
2069	ARG	NH2	20.742	50.080	24.428	14.13
2070	LYS	N	22.428	46.114	32.087	9.97
2071	LYS	CA	23.169	44.943	32.556	9.28
2072	LYS	C	22.295	43.656	32.712	10.67
2073	LYS	O	22.771	42.535	32.720	11.47
2074	LYS	CB	23.764	45.238	33.939	10.01
2075	LYS	CG	24.737	46.407	33.949	8.63
2076	LYS	CD	25.212	46.730	35.354	11.76
2077	LYS	CE	26.300	47.806	35.387	8.10
2078	LYS	NZ	26.725	47.986	36.771	8.13
2079	PHE	N	20.978	43.866	32.874	9.59
2080	PHE	CA	20.099	42.748	33.170	6.82
2081	PHE	C	19.223	42.333	31.987	7.73
2082	PHE	O	18.813	41.194	31.885	9.01
2083	PHE	CB	19.214	43.172	34.302	7.16
2084	PHE	CG	20.005	43.498	35.521	6.83
2085	PHE	CD1	20.451	42.470	36.348	11.66
2086	PHE	CD2	20.290	44.810	35.847	7.67
2087	PHE	CE1	21.108	42.746	37.544	9.99
2088	PHE	CE2	20.987	45.098	37.012	9.82
2089	PHE	CZ	21.389	44.069	37.871	10.60
2090	ARG	N	18.928	43.295	31.101	6.54
2091	ARG	CA	18.312	42.935	29.815	5.34
2092	ARG	C	18.778	43.936	28.745	6.76
2093	ARG	O	18.946	45.121	29.033	6.23
2094	ARG	CB	16.793	42.959	29.957	6.13
2095	ARG	CG	16.003	42.371	28.786	4.01
2096	ARG	CD	14.522	42.202	29.163	6.42
2097	ARG	NE	13.698	41.832	28.004	7.85
2098	ARG	CZ	13.475	40.588	27.608	7.40
2099	ARG	NH1	14.082	39.611	28.213	5.55
2100	ARG	NH2	12.650	40.317	26.626	8.19
2101	MET	N	18.984	43.449	27.517	6.50
2102	MET	CA	19.373	44.300	26.373	5.07
2103	MET	C	18.264	45.269	25.893	4.52
2104	MET	O	17.077	45.011	25.922	5.43
2105	MET	CB	19.754	43.386	25.208	5.61
2106	MET	CG	18.602	42.498	24.719	8.08
2107	MET	SD	19.100	41.534	23.260	10.26
2108	MET	CE	20.352	40.481	24.035	6.83
2109	GLY	N	18.702	46.408	25.380	5.33
2110	GLY	CA	17.798	47.158	24.511	6.72
2111	GLY	C	16.765	48.002	25.246	7.88
2112	GLY	O	15.895	48.607	24.644	8.44
2113	LEU	N	16.917	48.057	26.575	7.79
2114	LEU	CA	15.991	48.835	27.389	7.90
2115	LEU	C	15.847	50.280	26.931	9.43

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2116	LEU	O	16.811	51.025	26.952	11.69
2117	LEU	CB	16.435	48.759	28.855	5.63
2118	LEU	CG	16.114	47.411	29.485	3.21
2119	LEU	CD1	14.875	46.664	28.964	2.00
2120	LEU	CD2	16.413	47.234	30.993	6.08
2121	ILE	N	14.635	50.617	26.473	8.21
2122	ILE	CA	14.424	51.874	25.755	8.00
2123	ILE	C	15.014	51.906	24.344	9.79
2124	ILE	O	16.216	51.821	24.151	9.69
2125	ILE	CB	14.907	53.103	26.533	7.76
2126	ILE	CG1	14.427	53.121	27.981	5.80
2127	ILE	CG2	14.511	54.386	25.776	8.24
2128	ILE	CD1	14.710	54.364	28.762	7.02
2129	GLN	N	14.092	52.024	23.368	10.99
2130	GLN	CA	14.319	51.678	21.966	11.79
2131	GLN	C	14.653	52.880	21.069	11.05
2132	GLN	O	15.337	52.751	20.058	11.93
2133	GLN	CB	13.190	50.852	21.454	13.66
2134	GLN	CG	13.408	49.365	21.794	17.35
2135	GLN	CD	14.613	48.766	21.039	17.85
2136	GLN	OE1	14.671	48.808	19.824	17.92
2137	GLN	NE2	15.638	48.402	21.798	14.72
2138	THR	N	14.146	54.045	21.454	10.48
2139	THR	CA	14.523	55.241	20.676	10.99
2140	THR	C	15.015	56.439	21.584	10.88
2141	THR	O	14.872	56.440	22.812	13.32
2142	THR	CB	13.206	55.801	20.036	10.39
2143	THR	OG1	12.406	56.499	21.045	11.13
2144	THR	CG2	12.332	54.665	19.508	5.92
2145	ALA	N	15.526	57.490	20.947	11.27
2146	ALA	CA	16.040	58.653	21.696	12.40
2147	ALA	C	14.922	59.563	22.293	12.72
2148	ALA	O	15.128	60.317	23.230	12.68
2149	ALA	CB	16.884	59.495	20.743	9.84
2150	ASP	N	13.739	59.440	21.699	13.07
2151	ASP	CA	12.627	60.217	22.243	13.49
2152	ASP	C	11.999	59.518	23.460	11.38
2153	ASP	O	11.668	60.167	24.429	11.43
2154	ASP	CB	11.563	60.373	21.157	14.90
2155	ASP	CG	10.713	61.587	21.478	15.65
2156	ASP	OD1	11.277	62.628	21.814	20.35
2157	ASP	OD2	9.504	61.478	21.405	15.09
2158	GLN	N	11.911	58.184	23.464	8.92
2159	GLN	CA	11.597	57.530	24.722	9.07
2160	GLN	C	12.604	57.887	25.843	9.83
2161	GLN	O	12.229	58.053	26.996	11.31
2162	GLN	CB	11.618	56.017	24.539	6.40
2163	GLN	CG	10.410	55.426	23.789	7.52
2164	GLN	CD	10.618	53.949	23.490	8.30
2165	GLN	OE1	11.688	53.402	23.681	10.49
2166	GLN	NE2	9.596	53.335	22.960	5.63
2167	LEU	N	13.876	58.036	25.429	10.38

2168	LEU	CA	14.899	58.532	26.365	9.22
2169	LEU	C	14.542	59.919	26.917	11.76
2170	LEU	O	14.608	60.227	28.096	14.48
2171	LEU	CB	16.257	58.651	25.674	5.69
2172	LEU	CG	17.350	58.976	26.691	3.16
2173	LEU	CD1	18.730	59.387	26.183	3.34
2174	LEU	CD2	17.399	58.164	27.984	6.48
2175	ARG	N	14.189	60.765	25.959	11.77
2176	ARG	CA	13.847	62.121	26.325	11.99
2177	ARG	C	12.535	62.202	27.128	12.66
2178	ARG	O	12.373	63.015	28.034	15.67
2179	ARG	CB	13.757	62.891	25.023	10.45
2180	ARG	CG	13.274	64.311	25.258	11.84
2181	ARG	CD	12.982	64.996	23.947	14.66
2182	ARG	NE	12.991	66.432	24.187	15.50
2183	ARG	CZ	11.861	67.087	24.321	13.39
2184	ARG	NH1	10.719	66.475	24.238	14.80
2185	ARG	NH2	11.867	68.349	24.532	9.72
2186	PHE	N	11.590	61.331	26.796	10.85
2187	PHE	CA	10.374	61.254	27.565	10.59
2188	PHE	C	10.713	60.835	28.993	9.21
2189	PHE	O	10.219	61.439	29.914	13.15
2190	PHE	CB	9.413	60.250	26.930	12.58
2191	PHE	CG	8.132	60.221	27.703	13.60
2192	PHE	CD1	7.110	61.104	27.388	14.76
2193	PHE	CD2	7.968	59.339	28.773	15.39
2194	PHE	CE1	5.934	61.118	28.132	14.58
2195	PHE	CE2	6.799	59.362	29.523	15.49
2196	PHE	CZ	5.785	60.254	29.206	13.29
2197	SER	N	11.598	59.856	29.173	9.61
2198	SER	CA	12.076	59.508	30.549	11.91
2199	SER	C	12.490	60.695	31.440	13.91
2200	SER	O	12.041	60.822	32.561	15.55
2201	SER	CB	13.309	58.607	30.361	9.99
2202	SER	OG	12.988	57.388	29.633	13.54
2203	TYR	N	13.369	61.576	30.916	12.72
2204	TYR	CA	13.660	62.827	31.602	13.18
2205	TYR	C	12.385	63.670	31.910	14.92
2206	TYR	O	12.138	64.043	33.043	17.21
2207	TYR	CB	14.553	63.660	30.712	13.16
2208	TYR	CG	16.002	63.282	30.776	14.18
2209	TYR	CD1	16.411	62.111	30.180	16.94
2210	TYR	CD2	16.947	64.100	31.406	15.60
2211	TYR	CE1	17.734	61.726	30.172	18.68
2212	TYR	CE2	18.295	63.765	31.403	16.96
2213	TYR	CZ	18.682	62.574	30.758	19.92
2214	TYR	OH	20.008	62.233	30.655	20.96
2215	LEU	N	11.559	63.956	30.883	14.29
2216	LEU	CA	10.249	64.563	31.141	11.73
2217	LEU	C	9.468	63.942	32.331	13.72
2218	LEU	O	9.041	64.636	33.258	13.88
2219	LEU	CB	9.443	64.482	29.866	11.89

2220	LEU	CG	9.673	65.629	28.871	15.00
2221	LEU	CD1	9.334	65.412	27.398	15.00
2222	LEU	CD2	10.774	66.642	29.158	14.31
2223	ALA	N	9.318	62.599	32.273	13.35
2224	ALA	CA	8.564	61.864	33.295	12.89
2225	ALA	C	9.213	62.040	34.696	13.12
2226	ALA	O	8.582	62.474	35.653	13.73
2227	ALA	CB	8.309	60.393	32.891	10.58
2228	VAL	N	10.503	61.743	34.779	11.11
2229	VAL	CA	11.204	61.933	36.054	10.33
2230	VAL	C	11.237	63.384	36.609	10.96
2231	VAL	O	10.993	63.608	37.784	12.23
2232	VAL	CB	12.606	61.377	35.913	10.20
2233	VAL	CG1	12.546	59.906	35.484	11.84
2234	VAL	CG2	13.332	61.458	37.253	10.96
2235	ILE	N	11.560	64.377	35.760	10.85
2236	ILE	CA	11.577	65.764	36.191	8.53
2237	ILE	C	10.208	66.186	36.747	9.55
2238	ILE	O	10.125	66.781	37.812	13.70
2239	ILE	CB	12.040	66.687	35.033	12.52
2240	ILE	CG1	13.570	66.564	34.806	11.25
2241	ILE	CG2	11.699	68.164	35.335	3.61
2242	ILE	CD1	14.012	67.087	33.435	12.56
2243	GLU	N	9.121	65.820	36.020	9.61
2244	GLU	CA	7.751	66.097	36.515	9.71
2245	GLU	C	7.388	65.403	37.845	11.33
2246	GLU	O	6.888	65.977	38.806	9.63
2247	GLU	CB	6.755	65.653	35.442	9.81
2248	GLU	CG	5.280	65.882	35.870	17.01
2249	GLU	CD	4.989	67.337	36.130	20.22
2250	GLU	OE1	5.765	68.150	35.672	20.12
2251	GLU	OE2	4.011	67.716	36.770	21.83
2252	GLY	N	7.672	64.081	37.850	12.33
2253	GLY	CA	7.383	63.246	39.008	12.09
2254	GLY	C	8.175	63.692	40.243	13.63
2255	GLY	O	7.770	63.523	41.398	15.75
2256	ALA	N	9.326	64.327	39.971	12.57
2257	ALA	CA	10.116	64.799	41.081	14.07
2258	ALA	C	9.322	65.821	41.954	16.52
2259	ALA	O	9.483	65.941	43.167	16.67
2260	ALA	CB	11.371	65.387	40.495	12.23
2261	LYS	N	8.393	66.507	41.280	16.77
2262	LYS	CA	7.541	67.398	42.059	18.39
2263	LYS	C	6.832	66.678	43.258	17.76
2264	LYS	O	6.865	67.105	44.408	19.35
2265	LYS	CB	6.506	68.005	41.124	17.12
2266	LYS	CG	7.090	68.856	39.992	14.36
2267	LYS	CD	5.966	69.306	39.075	15.39
2268	LYS	CE	6.435	70.134	37.894	16.39
2269	LYS	NZ	5.285	70.300	36.996	21.56
2270	PHE	N	6.264	65.515	42.907	14.95
2271	PHE	CA	5.549	64.731	43.913	14.55

2272	PHE	C	6.529	64.115	44.923	15.10
2273	PHE	O	6.356	64.173	46.135	14.00
2274	PHE	CB	4.737	63.652	43.197	14.81
2275	PHE	CG	4.063	62.700	44.139	15.08
2276	PHE	CD1	4.788	61.680	44.744	16.62
2277	PHE	CD2	2.722	62.833	44.438	14.90
2278	PHE	CE1	4.201	60.834	45.687	14.26
2279	PHE	CE2	2.122	61.981	45.359	13.81
2280	PHE	CZ	2.854	60.983	45.992	11.28
2281	ILE	N	7.602	63.516	44.369	15.29
2282	ILE	CA	8.620	62.994	45.271	14.87
2283	ILE	C	9.098	64.058	46.323	18.20
2284	ILE	O	9.269	63.810	47.523	18.22
2285	ILE	CB	9.781	62.450	44.423	13.45
2286	ILE	CG1	9.314	61.364	43.436	10.62
2287	ILE	CG2	10.886	61.886	45.294	11.70
2288	ILE	CD1	8.566	60.206	44.086	4.61
2289	MET	N	9.239	65.281	45.809	18.52
2290	MET	CA	9.792	66.326	46.640	18.33
2291	MET	C	8.732	67.081	47.515	19.20
2292	MET	O	8.959	68.195	47.962	19.72
2293	MET	CB	10.605	67.243	45.721	17.77
2294	MET	CG	11.851	66.555	45.143	19.38
2295	MET	SD	12.907	65.705	46.383	20.87
2296	MET	CE	13.821	67.149	46.923	16.05
2297	GLY	N	7.574	66.434	47.745	18.14
2298	GLY	CA	6.695	66.952	48.792	18.26
2299	GLY	C	5.452	67.686	48.275	20.47
2300	GLY	O	4.563	68.022	49.049	22.07
2301	ASP	N	5.356	67.942	46.965	20.50
2302	ASP	CA	4.108	68.483	46.437	17.37
2303	ASP	C	3.162	67.337	46.013	17.32
2304	ASP	O	2.919	67.081	44.841	18.62
2305	ASP	CB	4.439	69.421	45.276	19.62
2306	ASP	CG	3.154	70.077	44.730	24.90
2307	ASP	OD1	2.113	69.959	45.386	26.11
2308	ASP	OD2	3.181	70.716	43.684	25.14
2309	SER	N	2.580	66.630	46.985	16.61
2310	SER	CA	1.600	65.618	46.540	16.15
2311	SER	C	0.437	66.083	45.684	16.64
2312	SER	O	-0.191	65.274	45.017	19.31
2313	SER	CB	1.018	64.974	47.843	16.12
2314	SER	OG	1.977	64.473	48.858	18.84
2315	SER	N	0.137	67.393	45.713	16.18
2316	SER	CA	-1.081	67.847	45.042	14.76
2317	SER	C	-1.003	67.619	43.503	14.88
2318	SER	O	-2.019	67.519	42.820	15.72
2319	SER	CB	-1.161	69.349	45.254	13.96
2320	SER	OG	-0.260	70.137	44.401	22.60
2321	VAL	N	0.253	67.507	43.003	13.31
2322	VAL	CA	0.437	67.281	41.570	14.74
2323	VAL	C	-0.202	65.960	41.092	15.66

2324	VAL	O	-0.608	65.824	39.951	13.81
2325	VAL	CB	1.896	67.243	41.083	15.18
2326	VAL	CG1	2.814	66.190	41.711	12.54
2327	VAL	CG2	2.515	68.549	40.598	15.63
2328	GLN	N	-0.243	64.979	42.006	16.96
2329	GLN	CA	-0.793	63.684	41.636	18.92
2330	GLN	C	-2.226	63.773	41.066	21.43
2331	GLN	O	-2.521	63.253	39.993	24.69
2332	GLN	CB	-0.734	62.761	42.839	17.47
2333	GLN	CG	-1.288	61.371	42.515	18.74
2334	GLN	CD	-0.938	60.331	43.569	18.38
2335	GLN	OE1	-0.084	60.526	44.399	19.34
2336	GLN	NE2	-1.630	59.234	43.514	18.40
2337	ASP	N	-3.081	64.507	41.797	23.31
2338	ASP	CA	-4.435	64.639	41.265	24.99
2339	ASP	C	-4.498	65.555	40.036	24.90
2340	ASP	O	-5.371	65.464	39.191	27.85
2341	ASP	CB	-5.359	65.090	42.386	30.46
2342	ASP	CG	-5.898	63.864	43.139	38.34
2343	ASP	OD1	-6.096	62.796	42.538	41.41
2344	ASP	OD2	-6.133	63.968	44.331	40.64
2345	GLN	N	-3.481	66.421	39.920	24.19
2346	GLN	CA	-3.341	67.176	38.686	24.10
2347	GLN	C	-3.036	66.310	37.465	22.53
2348	GLN	O	-3.619	66.479	36.402	22.16
2349	GLN	CB	-2.236	68.189	38.854	27.88
2350	GLN	CG	-2.519	69.162	39.994	35.96
2351	GLN	CD	-1.452	70.219	39.986	41.70
2352	GLN	OE1	-1.042	70.696	38.939	46.03
2353	GLN	NE2	-0.989	70.532	41.190	41.69
2354	TRP	N	-2.111	65.357	37.651	20.33
2355	TRP	CA	-1.847	64.398	36.574	17.39
2356	TRP	C	-3.136	63.679	36.183	17.81
2357	TRP	O	-3.426	63.468	35.016	19.79
2358	TRP	CB	-0.830	63.332	36.993	13.77
2359	TRP	CG	0.516	63.940	37.335	10.55
2360	TRP	CD1	1.046	65.159	36.878	9.50
2361	TRP	CD2	1.470	63.387	38.256	8.89
2362	TRP	NE1	2.254	65.372	37.454	9.63
2363	TRP	CE2	2.563	64.307	38.309	9.34
2364	TRP	CE3	1.485	62.233	38.992	7.20
2365	TRP	CZ2	3.624	64.047	39.152	6.71
2366	TRP	CZ3	2.570	61.964	39.836	8.42
2367	TRP	CH2	3.652	62.866	39.910	6.38
2368	LYS	N	-3.920	63.356	37.205	19.50
2369	LYS	CA	-5.171	62.681	36.902	22.56
2370	LYS	C	-6.181	63.495	36.071	23.90
2371	LYS	O	-6.735	63.007	35.084	23.96
2372	LYS	CB	-5.799	62.361	38.218	24.50
2373	LYS	CG	-7.008	61.458	38.044	28.26
2374	LYS	CD	-7.501	61.118	39.433	34.93

2375	LYS	CE	-8.576	60.059	39.389	39.02
2376	LYS	NZ	-9.083	59.968	40.759	41.94
2377	GLU	N	-6.383	64.761	36.493	23.93
2378	GLU	CA	-7.181	65.678	35.682	24.58
2379	GLU	C	-6.649	65.760	34.242	21.99
2380	GLU	O	-7.318	65.458	33.269	22.01
2381	GLU	CB	-7.206	67.072	36.321	30.24
2382	GLU	CG	-7.960	67.120	37.657	42.65
2383	GLU	CD	-9.484	67.012	37.473	50.82
2384	GLU	OE1	10.159	68.045	37.475	54.25
2385	GLU	OE2	-9.972	65.894	37.327	54.41
2386	LEU	N	-5.361	66.102	34.158	21.08
2387	LEU	CA	-4.739	66.203	32.844	22.45
2388	LEU	C	-4.934	65.008	31.923	23.20
2389	LEU	O	-5.055	65.104	30.712	23.99
2390	LEU	CB	-3.233	66.395	33.046	20.54
2391	LEU	CG	-2.790	67.845	33.160	18.96
2392	LEU	CD1	-1.487	68.124	33.900	20.13
2393	LEU	CD2	-3.847	68.949	33.168	19.21
2394	SER	N	-4.864	63.864	32.562	23.38
2395	SER	CA	-4.721	62.687	31.728	22.92
2396	SER	C	-6.100	62.254	31.142	23.30
2397	SER	O	-6.151	61.450	30.228	24.72
2398	SER	CB	-4.319	61.591	32.750	22.16
2399	SER	OG	-5.473	60.975	33.415	27.77
2400	HIS	N	-7.184	62.819	31.732	25.90
2401	HIS	CA	-8.537	62.618	31.210	28.59
2402	HIS	C	-9.030	61.156	31.255	30.18
2403	HIS	O	-9.507	60.620	30.270	30.25
2404	HIS	CB	-8.602	63.146	29.769	30.95
2405	HIS	CG	-8.313	64.620	29.712	34.62
2406	HIS	ND1	-7.438	65.162	28.838	36.95
2407	HIS	CD2	-8.885	65.653	30.480	34.71
2408	HIS	CE1	-7.474	66.484	29.058	38.33
2409	HIS	NE2	-8.339	66.806	30.042	36.25
2410	GLU	N	-8.866	60.555	32.442	32.02
2411	GLU	CA	-8.880	59.114	32.550	32.12
2412	GLU	C	10.319	58.458	32.274	34.76
2413	GLU	O	10.404	57.302	31.847	35.29
2414	GLU	CB	-8.241	58.464	33.758	32.31
2415	GLU	CG	-8.829	58.921	35.045	34.00
2416	GLU	CD	-8.282	58.062	36.156	35.79
2417	GLU	OE1	-7.104	57.728	36.149	34.22
2418	GLU	OE2	-9.052	57.673	37.019	40.13
2419	ASP	N	-11.327	59.215	32.616	37.80
2420	ASP	CA	12.729	58.834	32.627	40.36
2421	ASP	C	13.412	58.996	31.213	42.09
2422	ASP	OCT1	13.102	59.944	30.481	43.37
2423	ASP	CB	13.289	59.623	33.836	41.96
2424	ASP	CG	12.785	58.974	35.133	47.10
2425	ASP	OD1	12.786	57.758	35.206	47.56
2426	ASP	OD2	12.374	59.654	36.072	50.59

2427	ASP	OCT2	14.223	58.147	30.834	44.87
2428	HOH	O	1.590	36.257	19.829	22.41
2429	HOH	O	8.296	45.178	41.518	8.41
2430	HOH	O	9.270	50.471	21.734	19.65
2431	HOH	O	7.577	61.174	51.241	16.06
2432	HOH	O	18.943	38.939	37.699	17.27
2433	HOH	O	22.811	45.617	27.594	16.66
2434	HOH	O	6.371	36.383	28.124	13.20
2435	HOH	O	9.209	32.873	26.183	14.51
2436	HOH	O	16.479	44.901	44.793	23.25
2437	HOH	O	8.760	29.925	27.422	20.25
2438	HOH	O	4.215	58.428	19.845	22.23
2439	HOH	O	9.419	63.753	24.541	24.52
2440	HOH	O	-0.851	27.498	26.895	29.29
2441	HOH	O	15.941	25.654	27.134	22.26
2442	HOH	O	19.413	32.977	27.432	12.77
2443	HOH	O	27.512	49.614	31.335	40.23
2444	HOH	O	-0.436	61.801	47.891	47.15
2445	HOH	O	21.459	47.078	25.096	17.33
2446	HOH	O	2.837	27.864	27.715	17.29
2447	HOH	O	5.024	60.810	49.088	29.47
2448	HOH	O	20.997	29.985	32.990	39.54
2449	HOH	O	10.885	59.567	51.200	19.14
2450	HOH	O	16.023	56.714	18.058	21.46
2451	HOH	O	8.071	59.483	19.187	23.78
2452	HOH	O	22.091	57.680	39.956	22.67
2453	HOH	O	19.064	49.798	21.891	21.33
2454	HOH	O	-5.143	44.798	23.400	15.49
2455	HOH	O	1.980	66.688	31.326	25.33
2456	HOH	O	17.162	41.413	37.458	26.52
2457	HOH	O	-1.859	60.380	39.401	20.12
2458	HOH	O	-4.668	51.480	41.919	15.16
2459	HOH	O	4.708	30.728	44.704	22.73
2460	HOH	O	9.740	65.513	50.805	38.71
2461	HOH	O	1.814	50.953	17.669	30.06
2462	HOH	O	15.786	35.633	20.587	12.33
2463	HOH	O	1.462	57.677	45.374	23.51
2464	HOH	O	9.068	56.054	44.758	18.52
2465	HOH	O	25.060	34.834	23.092	34.44
2466	HOH	O	1.037	20.342	34.088	47.03
2467	HOH	O	16.506	29.904	19.735	17.43
2468	HOH	O	20.557	38.125	16.713	33.14
2469	HOH	O	10.887	44.145	44.506	27.05
2470	HOH	O	12.790	34.400	33.238	10.97
2471	HOH	O	13.677	30.353	37.505	59.66
2472	HOH	O	-3.086	57.405	41.033	36.02
2473	HOH	O	12.385	42.893	25.595	46.73
2474	HOH	O	21.344	47.271	40.333	20.06
2475	HOH	O	25.419	45.911	39.851	27.74
2476	HOH	O	9.958	57.066	20.295	16.04
2477	HOH	O	13.824	63.678	20.576	37.51
2478	HOH	O	1.949	34.748	41.972	16.46

2479	HOH	O	11.924	25.680	18.786	24.92
2480	HOH	O	8.764	31.931	16.917	30.52
2481	HOH	O	-4.221	36.972	46.588	28.63
2482	HOH	O	13.821	31.194	39.085	34.61
2483	HOH	O	6.696	27.669	43.269	29.04
2484	HOH	O	0.694	24.349	39.414	33.75
2485	HOH	O	3.032	49.405	45.063	12.51
2486	HOH	O	9.849	48.468	46.210	29.19
2487	HOH	O	23.380	28.613	22.797	25.48
2488	HOH	O	10.046	47.774	27.577	19.52
2489	HOH	O	21.363	43.357	41.852	34.99
2490	HOH	O	19.727	38.364	41.922	52.15
2491	HOH	O	13.859	55.007	29.048	33.35
2492	HOH	O	14.515	57.104	53.219	21.80
2493	HOH	O	-9.836	29.524	39.997	26.93
2494	HOH	O	15.693	44.242	14.713	25.00
2495	HOH	O	-0.431	50.825	24.089	17.41
2496	HOH	O	4.304	42.234	42.012	13.63
2497	HOH	O	7.488	43.798	44.456	22.44
2498	HOH	O	-7.835	34.880	45.632	36.15
2499	HOH	O	2.138	68.198	50.281	19.61
2500	HOH	O	2.980	26.111	37.904	31.74
2501	HOH	O	7.532	71.080	47.284	47.61
2502	HOH	O	23.456	43.284	24.031	33.57
2503	HOH	O	12.879	33.827	17.029	41.26
2504	HOH	O	20.888	52.812	40.217	32.00
2505	HOH	O	-9.383	62.551	34.350	30.07
2506	HOH	O	-8.835	48.846	24.502	42.77
2507	HOH	O	9.650	31.084	37.437	29.51
2508	HOH	O	26.005	51.793	38.260	31.70
2509	HOH	O	24.046	63.460	39.268	43.53
2510	HOH	O	19.228	57.561	17.667	36.93
2511	HOH	O	29.104	43.058	29.224	34.73
2512	HOH	O	-3.271	63.254	48.607	39.25
2513	HOH	O	-8.324	51.286	27.830	31.97
2514	HOH	O	21.456	64.000	35.006	51.35
2515	HOH	O	-8.889	27.216	28.324	24.05
2516	HOH	O	-7.122	39.723	21.296	25.00
2517	HOH	O	8.123	69.041	34.700	34.79
2518	HOH	O	11.982	38.083	21.811	25.95
2519	HOH	O	4.694	64.020	48.437	21.02
2520	HOH	O	17.885	25.230	29.617	36.99
2521	HOH	O	19.286	25.222	33.390	42.05
2522	HOH	O	-8.562	44.803	26.142	51.85
2523	HOH	O	-2.242	26.527	23.393	43.07
2524	HOH	O	15.970	32.954	18.673	44.57
2525	HOH	O	16.957	72.759	19.740	41.48
2526	HOH	O	18.945	40.529	27.705	20.81
2527	HOH	O	-6.563	33.542	23.890	44.78
2528	HOH	O	0.655	54.144	15.969	48.10
2529	HOH	O	15.452	42.847	26.665	67.31

2530	HOH	O	-5.796	57.757	39.132	35.87
2531	HOH	O	19.494	43.627	13.835	34.84
2532	HOH	O	8.922	55.846	16.058	55.98
2533	HOH	O	12.263	58.246	17.626	37.03
2534	HOH	O	14.753	66.276	52.641	30.00
2535	HOH	O	-0.697	58.698	48.711	56.27
2536	HOH	O	4.631	63.608	25.321	39.92
2537	HOH	O	26.057	51.777	34.940	56.34
2538	HOH	O	25.752	58.882	40.841	54.74
2539	HOH	O	15.383	70.120	19.035	43.73
2540	HOH	O	-8.062	21.118	40.565	30.10
2541	HOH	O	-5.664	37.797	19.071	34.90
2542	HOH	O	21.557	47.692	21.844	42.58
2543	HOH	O	16.120	23.050	31.744	38.14
2544	HOH	O	14.291	55.688	33.958	43.49
2545	HOH	O	22.485	41.730	21.237	47.32
2546	HOH	O	-3.228	63.778	28.090	44.59
2547	HOH	O	26.949	48.396	41.531	41.13
2548	HOH	O	23.942	39.006	22.657	43.94
2549	HOH	O	9.207	24.849	23.061	41.15
2550	HOH	O	6.750	71.340	43.221	54.51
2551	HOH	O	30.844	41.630	25.787	45.95
2552	HOH	O	-3.732	34.406	21.323	35.90
2553	HOH	O	-4.730	60.259	28.099	41.23
2554	HOH	O	25.149	31.323	20.979	58.72
2555	HOH	O	14.035	68.161	21.262	57.00
2556	HOH	O	12.454	34.648	27.576	54.08
2557	HOH	O	24.417	50.046	45.237	40.59
2558	HOH	O	5.535	36.921	48.195	32.86
2559	HOH	O	23.831	29.039	31.600	46.72
2560	HOH	O	21.844	62.478	48.694	45.22
2561	HOH	O	24.579	48.404	30.338	31.47
2562	HOH	O	14.659	31.918	30.697	18.81
2563	HOH	O	-1.318	30.530	47.378	31.01
2564	LIG	O1	13.892	44.198	17.349	17.64
2565	LIG	C2	13.816	45.044	18.486	15.35
2566	LIG	C3	12.387	45.372	18.768	14.39
2567	LIG	C4	11.353	45.039	17.981	14.98
2568	LIG	C5	11.543	44.211	16.758	12.97
2569	LIG	C6	12.784	43.377	17.076	16.70
2570	LIG	S7	11.937	46.075	20.258	13.76
2571	LIG	C8	10.288	45.912	19.771	14.99
2572	LIG	C9	10.047	45.402	18.557	16.33
2573	LIG	C10	8.663	45.297	17.953	14.29
2574	LIG	O11	8.537	45.250	16.765	16.29
2575	LIG	O12	7.552	45.243	18.690	11.51
2576	LIG	N13	9.206	46.366	20.611	15.13
2577	LIG	C14	9.318	47.070	21.737	13.37
2578	LIG	C15	7.975	47.489	22.364	13.19
2579	LIG	O16	7.777	48.528	22.914	14.53
2580	LIG	O17	7.008	46.559	22.413	13.61
2581	LIG	O18	10.375	47.351	22.323	12.30

2582	LIG	C19	14.638	46.212	18.060	3.64
2583	LIG	O20	15.877	45.679	17.667	2.90
2584	LIG	C21	16.713	45.231	18.698	11.97
2585	LIG	C22	17.949	44.543	18.423	14.27
2586	LIG	C23	18.635	44.315	19.605	13.98
2587	LIG	S24	17.780	44.784	21.023	15.89
2588	LIG	N25	16.601	45.291	20.050	12.72
2589	LIG	C26	18.462	44.268	17.177	16.50
2590	LIG	C27	19.670	43.576	17.086	13.27
2591	LIG	C28	20.396	43.313	18.253	12.47
2592	LIG	C29	19.871	43.620	19.501	12.46
2593	LIG	O30	18.420	45.879	21.625	15.41
2594	LIG	O31	17.376	43.603	21.782	15.88